cells/μL. Serum LDH and aminotransferase levels were normal. Treatment with Abelcet® (5 mg/kg daily) was initiated for bilateral *Aspergillus fumigatus* invasive pulmonary mycosis confirmed by CT scan and bronchial cultures. He showed significant improvement during 2nd week and near-complete resolution of pulmonary densities on CT scan. Due to exacerbation of cutaneous and orointestinal tract GvHD, the patient was given therapy with equine anit-thymocyte globulin, tacrolimus, and high-dose methylprednisolone. The 3rd week was marked by recurrence of fever (>39°C), and several new upper lobe pulmonary lesions. Blood and bronchial samples were sterile. Abelcet® dose was increased (7.5 mg/kg daily), and oral itraconazole (400 mg liquid every 8h) was initiated. On 24th day of hospitalization, he developed headache, 6th cranial nerve paralysis and unsteady wide-based gait. A superior vermian abnormality including intra-axial cerebellar lesion was noticed on magnetic resonance images of brain. Abelcet® was increased to 10 mg/kg daily. He developed progressive weakness, obtundation, and died on hospital day 36. On postmortem examination a large necrotic abscess involving the cerebellar vermis that extended into posterior brain stem was seen. Branching, septate hyphal elements extending from cerebellar blood vessels were seen on histological examination, and *S. apiospermum* was isolated within 72 h. Antifungal susceptibility (MIC μg/ml) included: amphotericin B >16.0; flucytosine >64.0; fluconazole 32.0; itraconazole 2.0; ketoconazole 0.5; and voriconazole 0.5. Cerebellum tissue bioassay for free amphotericin B showed levels <0.25 μg/ml.

Conclusions: Breakthrough invasive mycosis due to amphotericin B non-susceptible fungi is increasing. The newer broad-spectrum triazole-based agents with excellent central nervous penetration may significantly improve treatment options in patients at risk.

Pathogens causing blood stream infections in hospitalized cancer patients, 2000–2001

George J. Alangaden, Jessica Cutright, Pranatharthi Chandrasekar*
**Wayne State University and the Karmanos Cancer Institute, Detroit, Michigan, USA*

Blood stream infections (BSI) are a significant cause of morbidity and mortality among patients with cancer undergoing therapy. We evaluated all BSI which occurred in cancer patients at our institution during 2000–01 in order to identify the causative pathogens.

Nosocomial BSI was defined as symptoms and at least 2 positive blood cultures for coagulase-negative *Staphylococcus* (CoNS) and other skin contaminants and one or more positive blood cultures for all other pathogens.

A total of 399 episodes of BSI occurred in 273 patients. Of these patients hematological cancer (HC) was present in 104 and solid cancers (SC) in 169. Gram-positive pathogens were isolated in 221 (55%) of the BSI, gram-negatives in 161 (40%) and candida spp. in 17 (5%). Overall, the commonest pathogens isolated were *S. aureus* 72 (18%), CoNS 63 (16%), *Klebsiella* spp. 39 (10%), *E. coli* 39 (10%), *Enterococcus* 33 (8%), *Pseudomonas* spp. 24 (6%), viridans streptococci 22 (6%), *Enterobacter* spp. 18 (5%), *Corynebacterium* spp. 11(3%), and *S. pneumoniae* 9 (2%). Among HC the predominant organisms were *S. aureus* 20%, CoNS 16%, *Enterococcus* 10%, *Pseudomonas* 9%, *Klebsiella* 7% and *S. pneumoniae* 3%. In SC the commonest organisms were *S. aureus* 18%, CoNS 16%, *E.coli* 14%, *Klebsiella* 13%, *Enterococcus* 7%, viridans streptococci 6%, *Candida* 6%, and *Pseudomonas* 3%. Twenty-eight (27%) of the HC patients vs 29 (17%) of SC patients were neutropenic at the time of the BSI. In HC patients with neutropenia there were 41 episodes of BSI and the commonest organisms were Pseudomonas 17%, CoNS 17%, *Enterococcus* 12%, *S. aureus* 9%, *Candida* 7% and *E. coli* 7%. In contrast of the 34 episodes of BSI in SC patients with neutropenia the commonest organisms were *E. coli* 32%, *Klebsiella* 14%, *S. aureus* 12%, CoNS 9%, *Pseudomonas* 6%, and *Acinetobacter* 6%.

Gram-positive pathogens were the commonest pathogens isolated from BSI in cancer patients. However, the gram-negative pathogens such as *E. coli*, *Klebsiella*, and *Pseudomonas* are still significant causes of BSI especially among patients with neutropenia. Moreover, *Pseudomonas* still remains the most common pathogen isolated from BSI in HC patients with neutropenia.

A five-year clinical audit in the haematology ward of a tertiary care hospital: establishing degree of correlation between bacteraemia and oro-pharyngeal screens in immunocompromised patients and role of prophylaxis

A. Guleri, I. Butcher, A. B. J. Speekenbrink
Department of Microbiology, Western Infirmary, Glasgow, UK

Introduction: A clinical audit was carried out over 5 years (1997–2001) in the immunocompromised patients including neutropenic patients and bone marrow (autograft) transplant recipients in hematology ward of Gartnaval General Hospital, Glasgow, a tertiary care center.

Objective: It was aimed to establish the degree of correlation between bacterial isolates in oro-pharyngeal screen during bacteraemia episodes and role of antibiotic prophylaxis.

Methods: 2191 specimens from 255 patients with bacteraemia episodes were screened.

Results: 29.4% (75/255) incidence of positive correlation, and 38.4% (98/255) of negative correlation was observed. There was 32.1% (82/255) incidence of coagulase negative staphylococcus (CNS) bacteraemia.